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EG&G ROCKY FLATS

INTEROFFICE CORRESPONDENCE

Date October 10, 1994

To W L Peregoy, SEP, Bldg T130A, X5474

From T P Lovseth, Field Operations, Bldg 080, X8706

Subject REVIEW OF F C GRIGSBY'S PRELIMINARY SUBSURFACE CORRELATIONS - TPL-026-94

DOE Order 4700 1

Action None required

I have reviewed the salient data suggesting the possible presence of a fault striking about north 30 degrees east along a trend east of Building 371 towards the site of your proposed trench In my professional judgement, the subsurface correlations and geologic interpretations made by F C Grigsby are reasonable given the quality and distribution of the data However, I cannot make the firm statement that the fault exists because of the equivocal nature of these correlations The strata exhibits a lack of readily identifiable marker beds causing a large degree of uncertainty in the overall interpretation I concur with Mr Grigsby's opinion that the status of this work is preliminary

Geophysical logs from boreholes 42292, 69194, 69294, 69394, 69494, and 69594, located in the vicinity of the proposed trench were examined to determine the correlative stratigraphic relationships The correlations using the neutron gamma-ray logs made by F C Grigsby that suggest that 50 feet of vertical throw has occurred along this suspected fault My examination of these same logs found numerous correlation points and intervals between logs that supported Mr Grigsby's interpretation

Also, I examined geophysical logs from boreholes 43994, 44194, 43895, and 43794 These boreholes were drilled near Building 371 Although these correlations appear weaker than the correlations from the boreholes at the proposed trench site, I found some common stratigraphic intervals in the boreholes suggesting that the "A" horizon has been displaced

I was not able to come to any conclusions regarding possible faulting south of building 371 The boreholes were spaced farther apart and there may be more stratigraphic changes between boreholes Some of these logs are less suitable for detailed correlation work because of depth, log type and quality

More subsurface data should be obtained prior to accepting this structural interpretation The

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tectonic setting and seismic data shot across the site leads me to believe that faulting is present in the shallow bedrock More subsurface data acquired from key locations is necessary to adequately support Mr Grigsby's preliminary interpretation

Please call me if you have any questions regarding these comments

TPL bk

cc
L A Gregory-Frost for L A FROST
F C Grigsby
ERPD Records (2)

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